

	Incremental										
	ROD 1020		ROD 1030		ROD 1080	ROD 1070					
Interface											
Line counts*	100 1000	200 1024	250 1250	360 1500	400 2000	500 2048	720 2500	900 3600	1000	2500	3600
Reference mark	One										
Integrated interpolation*	-								5-fold	10-fold	
Cutoff frequency -3 dB	-		-		≥ 180 kHz		-		-		
Scanning frequency	≤ 300 kHz		≤ 160 kHz		-		-		≤ 100 kHz		
Edge separation a	≥ 0.39 μs		≥ 0.76 μs		-		-		≥ 0.47 μs		
System accuracy	1/20 of grating period										
Electrical connection	Cable, 1 m/5 m, with or without M23 coupling								Cable 5 m, without connecting element		
Voltage supply	DC 5 V ±0.5 V		DC 10 V to 30 V		DC 5 V ±0.5 V		DC 5 V ±5 %				
Current consumption without load	≤ 120 mA		≤ 150 mA		≤ 120 mA		≤ 155 mA				
Shaft	Solid shaft Ø 4 mm										
Mechanically permissible speed n	≤ 12000 rpm										
Starting torque	≤ 0.001 Nm (at 20 °C)										
Moment of inertia of rotor	≤ 0.5 x 10 ⁻⁶ kgm ²										
Shaft load	Axial: 5 N Radial: 10 N at shaft end										
Vibration 55 Hz to 2000 Hz	≤ 100 m/s ² (EN 60068-2-6)										
Shock 6 ms	≤ 1000 m/s ² (EN 60068-2-27)										
Max. operating temp. ²⁾	100 °C		70 °C		100 °C		70 °C				
Min. operating temp.	Fixed cable: -30 °C; Moving cable: -10 °C										
Protection EN 60 529	IP64										
Mass	≈ 0.09 kg										
Valid for ID	534900-x		534901-xx		534904-xx		534903-xx				

Bold: This preferred version is available on short notice.

* Please select when ordering

1) Restricted tolerances: signal amplitude 0.8 V_{PP} to 1.2 V_{PP}

2) For the correlation between the operating temperature and the shaft speed or supply voltage, see *General mechanical information*